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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/849,759	05/04/2001	GerogeAnn Pieters	00-053	2676

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HENRY E. BARTONY, JR.
LAW & FINANCE BUILDING, SUITE 1801
429 FOURTH AVENUE
PITTSBURGH, PA 15219

EXAMINER	
BOYD, JENNIFER A	

ART UNIT	PAPER NUMBER
1771	

DATE MAILED: 12/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/849,759	PIETERS, GEROGEANN
	Examiner	Art Unit
	Jennifer A Boyd	1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 December 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 – 7, 10 – 16, 19 and 24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 – 7, 10 – 16, 19 and 24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Response to Amendment

4. Applicant's Request for Reconsideration, filed December 2, 2003, of the finality of the rejection of the last Office action dated 9/10/2003 is persuasive and, therefore, the finality of that action is withdrawn. Claims 1 – 7, 10 – 16, 19 and 24 are pending. In view of Applicant's Arguments, the Examiner withdraws the 35 U.S.C. 103(a) rejection of claims 1 – 7, 10 – 16, 19 and 24 over Takahashi et al. (US 5,928,778) in view of O'Dell (US 5,866,209) as set forth in paragraph 3 of the previous Office Action dated 9/10/2003. Despite these advances, the invention as currently claimed is not found to be patentable for reasons herein below.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1 – 7, 10 – 16, 19 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al. (US 5,928,778) in view of Davis (US 5,037,700).

Takahashi teaches a decorative material which is excellent in flexibility and abrasion resistance (Abstract). The decorative material of this invention can be used for various purposes such as decorating surfaces of buildings, vehicles, ships, furniture, musical instruments, cabinets and decorating wrapping materials (column 11, lines 50 – 55).

As to claims 1, 15 and 24, Takahashi teaches a material including a substrate and an abrasion resistant coating layer. Takahashi teaches that substrate can be a paper, plastic film or sheet, or metallic foil or plate (column 1, lines 66 – 67). It is preferable to use a flexible material as the substrate (column 2, line 5). Takahashi teaches that the substrate can be a composite substrate which can be obtained by laminating two or more substrates by any known means, for instance, by the use of an adhesive agent, or by effecting thermal fusion (column 2, lines 66 – 67 and column 3, lines 1 – 3). The composite substrate comprising two or more substrates is equated to Applicant's "inner protective layer", "base material", "bonding material", "decorative material" and "outer decorative layer". Takahashi teaches that substrate can be a paper, plastic film or sheet, or metallic foil or plate (column 1, lines 66 – 67). Examples of the types of paper are tissue paper, craft paper, titanium paper, linter paper, cardboard, plasterboard paper, raw fabric of so-called vinyl wall paper, high-grade paper, coated paper, art paper, vegetable parchment, glassine paper, animal parchment, paraffin paper and Japanese paper. In addition, paper-like sheets can be used as the substrate such as woven or nonwoven fabrics produced from inorganic fibers such as glass fiber, alumina fiber, silica fiber and carbon fiber or organic fibers such as polyester of Vinylon (column 2, lines 15 – 27). A plastic sheet can be used as a substrate in the form of an acrylic film (column 2, lines 36-37). It should be noted that the method of forming the "inner protective layer", the "bonding material" and the "outer protective layer" is not germane to the issue of patentability of the composite material itself. Therefore, the limitation of "an aqueous acrylic polymer dispersion medium which is applied wet and bond upon drying is not given weight". Due to the fact that a composite substrate can be used, one embodiment of Takahashi, a composite substrate of 4 layers can be used. For instance, Takahashi

teaches a "base material" bonded to an "inner protective layer", a "bonding material" bonded to the second side of the base material, a "decorative layer" such as a paper or a paper-like sheet bonded to the "base material" and an abrasion resistant coating layer, or "outer protective layer", on the opposing side of the "decorative layer". In one embodiment of Takahashi, the "inner protective layer", the "bonding material" and "outer protective layer" can be comprised of acrylic film (column 2, lines 37 - 40).

Takahashi teaches that the substrate can be a composite substrate which can be obtained by laminating two or more substrates by any known means, for instance, by effecting thermal fusion (column 2, lines 66 – 67 and column 3, lines 1 – 3). Therefore, in the embodiment where the "inner protective layer", the "bonding material" and "outer protective layer" are acrylic films, any application of thermal fusion to the acrylic films would bond the "base material" and the "decorative layer" together to created the desired composite of the Applicant.

However, as to claims 1, 5 – 7, 15, 19 and 24, Taskahashi fails to teach that acrylic films which bind the layers together can be in ~~the can be in~~ the form of an aqueous acrylic polymer dispersion medium which is applied wet and bonds upon drying.

Davis is directed to flexible laminates useful for a wide range of applications such as flexible packaging, graphic arts and industrial uses (column 1, lines 25 – 35). Davis teaches a laminate comprising various layers consisting of wovens, non-wovens, paper and other flexible materials (column 2, lines 40 – 60). Davis teaches bonding the layers together using a water-borne laminating adhesive comprising a copolymer of an akyl acrylate or alkyl methacrylate (Abstract). Davis notes that the use of the water-borne laminating adhesive creates a laminate

with high bond strength, superior heat resistance and chemical and water resistance (Abstract). It should be noted that acrylic is inherently water resistant and translucent as required by claims 5 – 7 and 19.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the water-borne laminating adhesive comprising a copolymer of an akyl acrylate or alkyl methacrylate as suggested by Davis to laminate the layers of Takahashi motivated by the desire to create a flexible laminate with superior heat, chemical and water resistance.

As to claims 2 and 3, Takahashi teaches that the "base material" can be made out of a paper-like sheet such as a nonwoven comprising fibers such as carbon or alumina fibers (column 2, lines 21 – 26), which are known in the art to be high in strength.

As to claim 4, Takahashi teaches that the substrate can be a composite substrate which can be obtained by laminating two or more substrates, therefore, an additional paper-like layer such as a "woven backing" could be attached to the "base material".

As to claims 10, 11 and 16, Takahashi teaches that the "decorative layer" can be comprised of paper. Vegetable parchment paper among other papers (column 2, lines 14 – 26) typically has a textured finish and can have a generally random wrinkled pattern. Takahashi also notes that is possible to use a substrate having a rough or three-dimensional pattern (column 2, lines 9 – 14).

As to claim 12, Takahashi teaches that the "decorative layer" can be a board such as veneer (column 2, lines 45 – 50), which has a hard finish.

As to claim 13, Takahashi teaches that the "decorative layer" can be a paper such as vegetable parchment paper (column 2, lines 14 – 26), which has a smooth or calendared finish.

As to claim 14, Takahashi teaches that the "decorative layer" can be a paper-like material such as a woven fabric comprising alumina and carbon fibers (column 2, lines 21 – 27). A paper-like material implies a smooth or semi-smooth surface, therefore, the woven fabric would have to be woven tightly to give a smooth appearance. The "decorative layer" would have a hard finish due to fiber content of high strength rigid fibers.

Response to Arguments

4. Applicant's arguments with respect to claims 1 – 7, 10 – 16, 19 and 24 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A Boyd whose telephone number is 703-305-7082. The examiner can normally be reached on Monday thru Friday (8:30am - 6:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Jennifer Boyd
December 15, 2003

TERREL MORRIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700